

**Notice of Allowability**

Application No.

09/858,332

Examiner

Sheridan L. Swope

Applicant(s)

TCHAGA ET AL.

Art Unit

1656

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address–**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment of August 9, 2006.
2. ☒ The allowed claim(s) is/are 15-20, 26-28, and 39-47.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

Claims 15-20, 26-28, and 39-47 are pending.

Applicant's response, on August 9, 2006, to the Ex parte Quayle of this case mailed June 13, 2006, is acknowledged.

#### ***Examiner's Amendment***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

#### ***Specification***

For paragraph [0011], the penultimate line, replace –sequence of SEQ ID NO: 19; and a peptide having an amino acid sequence of SEQ ID– with –sequence of SEQ ID NO: 19; and (5) a peptide having an amino acid sequence of SEQ ID–.

For paragraph [0020], the last line, replace –(SEQ ID NO: 24)– with –(SEQ ID NO: 6)–.

Authorization for this examiner's amendment was given in a telephone interview with David Scherer on September 11, 2006.

#### ***Allowable Subject Matter***

Claims 15-20, 26-28, and 39-47 are allowed.

The following is an examiner's statement of reasons for allowance:

All pending claims, Claims 15-20, 26-28, and 39-47, are limited to an isolated nucleic acid molecule as well as vectors and host cells comprising the nucleic acid molecule, wherein the nucleic acid molecule encodes a metal ion affinity peptide. The recited nucleic acid molecules

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are free of the art. Although metal ion affinity peptides, and encoding polynucleotides, are known in the art, the art neither teaches the specific metal ion affinity peptides recited nor provides motivation make said specific metal ion affinity peptides or the encoding polynucleotides.

The utility of the recited nucleic acid molecules, as encoding metal ion affinity peptides, is credible based on expression in heterologous host cells and analysis by an enzymatic assay (Example 1-2). In addition, it is well known in the art that peptides having high concentration of consecutive basic amino acids, such as histidine, lysine, and arginine, bind to metal affinity columns. Moreover, such peptides can be used as a tag for purification of fusion proteins comprising the tag (Chaga et al, 1999(a)(b); CLONTECHniques, 1999). Therefore, the recited isolated nucleic acid molecules, vectors, and host cells have a specific and substantial patentable utility in the preparation of fusion proteins that can be purified using the linked metal ion affinity peptide.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan L. Swope whose telephone number is 571-272-0943. The examiner can normally be reached on M-F; 9:30-7 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sheridan Lee Swope, Ph.D.  
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SHERIDAN SWOPE, PH.D.  
PRIMARY EXAMINER